

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. **(Currently amended)** A device for determining a position of a vehicle on a roadway by using radio waves which are emitted from the device and reflected by the vehicle and received by at least two array antennas arranged across the roadway, comprising:

each of the array antennas including a number of antenna elements, one of the antenna elements in the respective array antenna constituting a phase center of the array antennas, and

wherein the antenna elements of the array antennas are connected to one another such that a distance between the phase centers of the array antennas included is smaller than half the width of an individual array antenna, and

wherein the different phase centers of the respective array antennas are placed at least a close distance to each other.

2. **(Previously Presented)** The device according to claim 1, wherein the connection comprises interweaving the array antennas with each other in that the phase center of one array antenna is arranged among the antenna elements of another array antenna .

3. **(Canceled)**

4. **(Previously Presented)** The device according to claim 2, wherein some of the antenna elements are at the same time connected to more than one array antenna .

5. **(Previously Presented)** The device according to claim 4, wherein signals obtained from antenna elements which are utilized by more than one array antenna undergo a power amplification, followed by a power division of the amplified signal on the respective array antenna .

6. **(Previously Presented)** The device according to any of the preceding claims, wherein an azimuth angle θ to the vehicle is determined from an antenna position where at least one pair of substantially horizontally arranged array antennas is arranged.

7. **(Previously Presented)** The device according to claim 6, wherein an angle of elevation to the vehicle is determined from the antenna position where at least one pair of substantially vertically arranged array antennas is arranged.

8. **(Previously Presented)** The device according to claim 7, wherein the position of the vehicle in relation to the antennas is determined by means of knowledge of the azimuth angle θ and the angle of elevation.